 **UNIVERSITY OF MAINE AT FARMINGTON**

**COLLEGE OF EDUCATION, HEALTH AND REHABILITATION**

**LESSON PLAN FORMAT**

**Teacher’s Name:** Tyler Brown **Lesson #:** 3 **Facet:** Produce   
**Grade Level:** 9-12 **Numbers of Days:** 3-4   
**Topic:** Geography  
  
  
**PART I:**  
  
**Objectives**  
[Student](http://edu221spring2013class.wikispaces.com/L3+Tyler+Brown)s will understand that the study of geography helps to better predict consequences of human interaction at the local, state, national, and global level  
  
  
Student will know climate, CO2, flooding, o-zone, pollution, climate change, geographical evolution, rising sea-levels  
  
  
Student will be able to produce examples of what effects CO2 levels.  
  
  
**Product:** Glogster  
  
**Maine Learning Results (MLR) or Common Core State Standards (CCSS) Alignment**  
Maine Learning Results  
Content Area: [Social Studies](http://edu221spring2013class.wikispaces.com/L3+Tyler+Brown)  
Standard: D. Geography  
Standard: D1 Geographic [[#|Knowledge]], concepts, themes, and patterns  
Grade Level Span: 9-Diploma  
Students understand the geography of the United States and various regions of the world and the effect of geographic influences on decisions about the present and future.  
  
Rationale: Understanding the effects of rising sea-levels and CO2 levels in the Earth's atmosphere and its effect on humans and geography will encourage student involvement in policies regarding our environmental future.  
  
**Assessments**   
  
**Formative (Assessment for Learning)**  
**Section I – Checking for understanding during instruction**  
Students will participate in a "numbered heads" activity which will allow for peer and teacher feedback and assessment simultaneously. Similarly, a timed-pair-share activity will encourage student participation while checking for understanding.  
  
**Section II – timely feedback for products (self, peer, teacher)**  
A sandwich chart graphic organizer will also be completed and handed in for review by the teacher as a type of formative assessment. The teacher will provide feedback on the graphic organizer for each student so that they are aware of the key points of the lesson. This is a form of self and teacher feedback. As previously mentioned, peer feedback is received during numbered heads and timed-pair-share activity.  
  
**Summative (Assessment of Learning):**  
Glogster: Students will construct a multimedia-rich poster of everything they have learned about rising CO2 levels and its effect on geographical elements including its effect on human geography.  
  
**Integration**  
**Technology:** Integrated with creation of Glogster where students will be able to create a scene or tell a story about rising CO2 levels and its effect on Earth displaying everything they have learned thus far.  
  
  
**Content Areas:** English: Through vocalizing and [[#|writing]] thoughts/opinions/facts about the content in a variety of activities.  
Art: Through creating enhanced multimedia visuals that display their unique thoughts on this current issue.  
Music**:** May be incorporated into Glogster with detail on how it relates to the content.  
  
  
**Groupings**   
**Section I - Graphic Organizer & Cooperative Learning used during instruction**  
The sandwich chart graphic organizer is used during instruction throughout the lesson so students can organize their thoughts and be assisted in formulating opinions. The timed pair share and numbered heads activities provide adequate time for cooperative learning.  
  
**Section II – Groups and Roles for Product**  
Group work/discussion will be completed prior to creation of the product. The product will be created and presented individually so as to capture the exclusive and unique thoughts of every person. During the "timed-pair share" activity, students will work with a partner that sits near them to discuss and reflect on the material presented in the hook video.  
  
**Differentiated Instruction**  
  
**MI Strategies**  
  
**Verbal:** "Numbered heads" activity includes group discussion of what effects CO2 levels.  
**Logic:** Upon creation of the "sandwich chart" graphic organizer, students will be asked to consider how what they created can be viewed as a "formula" or "equation" for an increase in CO2 and the teacher will demonstrate what the formula would look like in mathematical terms on the board.  
**Visual:** Visual learners will benefit from the documentary (hook) and from reviewing their personally created graphic organizers.  
**Musical:** When students create their Glogster, musical intelligences will be able to add musical media to their Glog and explain how it relates to the topic or its main themes.  
**Kinesthetic:** Kinesthetic intelligences will engaged by the hands-on creation and customization of their Glog.  
**Intrapersonal:** Students will work independently on their Glogs  
**Interpersonal:** Students will work together in paired discussions during the "timed pair-share" activity followed by a larger class discussion and the "numbered heads" activity.  
**Naturalist:** Naturalists will be engaged by the content of the lesson throughout as it directly relates to environmental concerns.  
  
  
**Modifications/Accommodations**  
***From IEP’s ( Individual Education Plan), 504’s, ELLIDEP (English Language Learning Instructional Delivery Education Plan)*** *I will review student’s IEP, 504 or ELLIDEP and make appropriate modifications and accommodations.*  
  
**Plan for accommodating absent students:**  
Students will be expected to check class wiki for an overview of what was covered in class as well as what is assigned for homework. They will also be provided with my e-mail address to be able to contact me for clarification. "Learning buddies" will also be partnered at the beginning of class to provide additional information for the absent student which will serve the dual purpose of keeping the absent student up to pace as well as reinforcing (for the learning buddy) what was covered in class when they reiterate what was covered.  
  
  
  
**Extensions**  
  
**Type II technology:**   
Class wiki is a type two technology because it allows for easy sharing of information including links to additional forms of media that will appeal to the multiple intelligences, meaning that whoever may be absent will have multiple choices for catching up on what they missed including extra media-rich resources.   
  
**Gifted Students:**  
While there is a defined criteria and rubric for the Glogster, it will be noted that the sky is the limit on its creation. Students who get really into the project and would like to have their poster be seen will be given the resources to have their project sent to local government officials and lobbyist organizations that might take interest in their demonstration of this global issue. Students who decide to go this far will be encouraged to implement a section of their poster that explains what we can do locally to help impact change on what is usually thought of as a global-scale issue.  
  
**Materials, Resources and Technology**  
  
Laptops, sandwich chart graphic organizer, pens/pencils, journals.  
  
  
**Source for Lesson Plan and Research**  
  
<http://www.cbsnews.com/video/watch/?id=4586903n>  
  
<http://co2now.org/>  
  
www.wikispaces.com  
  
  
  
**PART II:**  
  
**Teaching and Learning Sequence (Describe the teaching and learning process using all of the information from part I of the lesson plan)** *Take all the components and synthesize into a script of what you are doing as the teacher and what the learners are doing throughout the lesson. Need to use all the WHERETO’s. (3-5 pages)*  
  
Room Arrangement: Desks are organized into groups of 4.  
  
  
Day One:  
**Review/Hook (40 mins)**: Students will connect previous lesson's theme to this lesson through viewing the Electronic Wasteland documentary which will be split up into different sections allowing for discussions and formative assessment throughout.  
**Timed-Pair Share (10 mins):** Students will take turns discussing their thoughts with a partner followed by sharing their one, most important thought, aloud with the class.  
**Glogster (30 mins):** Students will be presented a student sample of the product they are about to create and then begin the first stages of [development](http://edu221spring2013class.wikispaces.com/L3+Tyler+Brown). Teacher will assist with technology and provide additional examples when necessary to enhance understanding of project goals.  
  
Day Two:  
**Glogster (40 mins):** Students will come into class and continue working on their product.  
**Brain Break (3-5 mins):** Students will be given time to take a break and then refocus.  
**Numbered Heads(20 mins):** Formative assessment​ will be conducted and students are put into groups to answer assigned questions about their product and the goals of the project. See content notes for additional information about how this will be conducted.  
  
**Remainder of class** will be utilized to allow students to work independently on their Glogsters. If a student thinks he or she is already finished at this point, the teacher review the product, check to see if there is anything missing from the rubric that can be improved upon, and offer feedback  
  
  
Day Three:  
  
**Glogster:** Class will begin in similar fashion to day 2 where students are working on their products during an open Q+A session while putting the final touches on their product.  
**Presentations:** Remainder of class will be provided for students to begin presenting their final products. See content notes for how this will be conducted.

**Optional day 4** is provided if necessary to finish/present final product.  
  
  
Students will understand that they are each responsible for helping create and reform social and environmental policies that will shape our future. They will also understand the geography of the United States and various regions of the world and the effect of geographic influences on decisions about the present and future. The **hook** used to gain student's attention is a documentary detailing the actions of corrupt recycling companies in the U.S. and their effect abroad.  
**Where, What, Why, Hook Tailors:** Verbal, Logical, Visual, Inter/Intrapersonal, Naturalist.  
  
Students will need to know about climate, CO2, flooding, o-zone, pollution, climate change, geographical evolution, and rising sea-levels. Instruction will be delivered through a repeated process of group discussion, intrapersonal reflection, and formative assessment. Through use of the timed-pair-share activity, numbered heads, and the sandwich chart graphic organizer, students understanding of the material will be reinforced using multiple intelligences and the teacher will be able to assess each student’s connection and understanding with and of the content through being an active member of this process. See content notes for more detailed explanation of how the class will be conducted.  
**Equip, Explore, Rethink, Tailors:** Verbal, Logical, Visual, Kinesthetic, Inter/Intrapersonal, Naturalist.  
  
Students will be able to produce examples of what effects CO2 levels and create a glogster that outlines this process and displays why this information is relevant to today's society. Each student will be expected to create their own product, but as a class they are able to help each other learn the technology, bounce ideas off of each other during creation, and serve as peer assessors and assistants during the creation of the product in an informal/unassigned structure. This will help fortify their ability to problem solve on their own as well as with the help of peers and future colleagues. Teacher is expected to facilitate in discussion, troubleshoot technology, organize and deliver a routine schedule in the class to help create structure, and serve as a constant example of positive attitude and enthusiasm about the topic. Students will also be given multiple opportunities to have formative assessment conducted through Q+A and one-on-one sessions.  
**Rethink, Revise, Refine, Tailors:** Verbal, Visual, Kinesthetic, Musical, Logical, Inter/Intrapersonal, Naturalist.  
  
**Content Notes**   
  
**Day One**  
  
Building off of the theme produced in lesson 2 about learning Geography through environmental-based case studies, students will watch a CBS produced documentary on a corrupt recycling company based out of the U.S. While watching the film, it is explained that students will take notes using a sandwich chart graphic organizer. Throughout the 20 minute clip, the teacher will pause the film multiple times to highlight the key points and check for understanding by allowing students to raise their hands in response to questions posed by the teacher. This will serve the dual purpose of allowing students a moment to catch up on note taking in response to the conversation. (**40 minutes**)  
  
After the film, students will participate in a "timed-pair share" activity where students will work with a partner that sits near them. Students will be instructed that one person in the group will share their thoughts for 90 seconds while their partner actively listens and takes notes. The teacher will use an online timer set to 90 seconds to allow students to know how much time they have to share their thoughts before switching roles. The teacher will then instruct students to find a new partner to repeat the process with one more time. (**10** **minutes**)  
  
For the last **30 minutes** of class, the teacher will hand out the rubric for the creation of the Glogster, share a student sample of a completed product, and allow students to begin the creation of their Glogster.  
  
**Day Two**  
  
Students will immediately begin working on their Glogster as class begins, but for students who have questions about the technology, need help finding resources, or have any general questions about the assignment or material there will be an open Q+A session taking place during the beginning of the work period. Students will work mostly independently on their projects for **40 minutes** (mostly meaning that it is not expected for the class to remain silent, as bouncing ideas off of each other and assisting one another on the project is encouraged and accepted during this time). It will be explained that after 40 minutes the class will be offered a brain break. Teacher will continue to move around the room, check for understanding, and answer any questions on an individual basis that students may still have.  
  
**3-5 minute** brain break is offered. During this time it is acceptable for students to continue working if they so choose.  
  
After the brain break, students will become re-engaged through the "numbered heads" activity. (Note that if previous formative assessment has already identified that students are on pace and understand the material, this activity can be skipped in order to provide more time for the completion of student products). (**20 minutes**)  
  
**Remainder of class** will be utilized to allow students to work independently on their Glogsters. If a student thinks he or she is already finished at this point, the teacher review the product, check to see if there is anything missing from the rubric that can be improved upon, and offer feedback. If the student has met all the requirements on the rubric, the teacher will offer extra credit if the student can research and incorporate examples of things people in the community can do in order to counter-act rising CO2 levels. It will be explained that exceptional products will be nominated by class mates at the end of the 3rd day to be sent to local government officials and relevant lobbyists so that the student's work can be applied to the real world and potentially impact real societal change.  
  
**Day 3**  
  
Class will begin similar to day 2, with a working Q+A session about the products. Students are aware that the first **30 minutes** of class is only provided to put the final touches on their product. This time is also allotted for students to meet with the teacher individually to pose questions and receive feedback.  
  
The remaining **50 minutes** of class will be utilized for students to present their final products to the class. The presentations are informal and will not be graded. This is simply a time for students to share their hard work and receive an ovation from their peers. This process will serve the dual purpose of fortifying students understanding of the material by seeing it through the point of view of a variety of fellow students.

* If all presentations are complete by the end of this class, then students will nominate 6 of their favorite presentations to be sent to local government officials and relevant lobbyists. Students will then vote on the 6 nominated presentations and the 3 products that receive the largest number of votes will be sent. In the event of a draw, between 2 or more, both or all products will be sent out (adjust numbers with relevancy to class size).
* If not all presentations are complete by the end of class, the first half of a fourth day will be provided to wrap up this lesson and move on to the next.

**Handouts**  
- Sandwich Chart  
  
  
**Maine Common Core Teaching Standards for Initial Teacher Certification and Rationale**  
  
***Standard 1 – Learner Development. The teacher understands how learners grow and develop, recognizing that patterns of learning and development vary individually within and across the cognitive, linguistic, social, emotional, and physical areas, and designs and implements developmentally appropriate and challenging learning experiences.***  
  
  
***Learning Styles***  
  
**Rationale:** Through a variety of activities that appeal to all intelligences and learning styles, the teacher demonstrates understanding and assists in providing an effective learning environment where each individual can become the center of their own learning.  
  
**Beach Ball** (variety of resources, adaptive environment, various manipulative(s), choices of activities, spontaneity, extensions to activities and personal freedom)  
  
The glogster product allows for a seemingly infinite amount of paths to take that allows each student to express their own unique thoughts and opinions. Offering an optional 4th day extension, varieties of formative assessment activities, and a rubric that allows for personal freedom will all benefit Beach Ball learning styles.  
  
**Clipboard** (organization, structure, visual directions, clear closure, sequential learning, clear procedures, consistent routines, clear expectations)  
  
Clipboards are respected by outlining class agenda before starting each day, offering a student sample before creation of the product, connecting material to previous lessons, and by providing a well-drafted rubric that clearly identifies expectations.  
  
**Microscope** (discovery learning, analyzing concepts, deep exploration, discussion, focus on details, ownership)  
  
Connecting class material with the larger [[#|picture of]] world events through presentation and discussion of documentary is highly attractive to microscope learning styles. Reviewing one's own thoughts through peer and class discussion on a plethora of occasions allows students to think critically about how individual actions impact larger worldly events. Lastly, allowing infinite potential in the creation of the Glogster product allows microscopes to dive into deep details on the subject and also provides them a sense of ownership over their work. By the end of the lesson, each student will have created something that can be used to impact change in the larger society.  
  
  
**Puppy** (comfortable environment, encouraging atmosphere, supportive grouping, safe climate, respectful colleagues, empathic listeners, sensitive peers)  
  
Classroom arrangement, group work, open and respectful discussion that encompasses the thoughts of each individual student and reinforces support and encouragement to share one's own opinion are all strategies evident in this lesson to appeal to puppy learning styles. Active listening is practiced across a wide range of activities as well.  
  
***Standard 6 -* *Assessment. The teacher understands and uses multiple methods of assessment to engage learners in their on growth, to monitor learner progress, and to guide the teacher's and learner's decision making.***  
  
***Formative:***  
**Section I – checking for understanding during instruction**  
The sandwich chart graphic organizer allows for students to organize their thoughts and then receive feedback from the teacher the following day.  
  
**Section II – timely feedback for products (self, peer, teacher)**  
  
  
Turn and talk activity, numbered heads activity, and two separate Q+A sessions are offered to provide timely feedback by oneself, one's peers, and the teacher. There is also an allotted time during creation of the product for a one-on-one review by the teacher to help assist in student understanding and development of product.  
  
  
***Summative***  
Glogster: ​Students will create a glogster that details what effects CO2 levels in the atmosphere and connects the importance of that information to our current society.  
  
  
***Rationale:*** Through connecting students learning goals to impacting change in both global and local communities, there can be a clearly defined picture of how the student has grown to understand and meet course requirements and expectations.  
  
  
***Standard 7* - *Planning Instruction. The teacher plans instruction that supports every student in meeting rigorous learning goals by drawing upon knowledge of content areas, curriculum, cross-disciplinary skills, and pedagogy, as well as knowledge of learners and the community context.***  
  
***Content Knowledge:***  
(see content notes)  
  
***MLR or CCSS:*** *Students understand the geography of the United States and various regions of the world and the effect of geographic influences on decisions about the present and future.*  
  
***Facet:*** Empathy: Students will produce their own digital media poster that attempts to inform and change society amidst a relevant and crucial global issue.  
  
***Rationale:*** Accomplished via connection to previous lessons and content, incorporation of all learning styles and MI's, and through providing adequate time for learners to share their thoughts and practice communication skills that are necessary to informing members of their community about crucial societal issues.  
  
***Standard 8 -* *Instructional Strategies. The teacher understands and uses a variety of instructional strategies to encourage learners to develop deep understanding of content areas and their connections, and to build skills to apply knowledge in meaningful ways.***  
  
***MI Strategies:***  
**Verbal:** "Numbered heads" activity includes group discussion of what effects CO2 levels.  
**Logic:** Upon creation of the "sandwich chart" graphic organizer, students will be asked to consider how what they created can be viewed as a "formula" or "equation" for an increase in CO2 and the teacher will demonstrate what the formula would look like in mathematical terms on the board.  
**Visual:** Visual learners will benefit from the documentary (hook) and from reviewing their personally created graphic organizers.  
**Musical:** When students create their Glogster, musical intelligences will be able to add musical media to their Glog and explain how it relates to the topic or its main themes.  
**Kinesthetic:** Kinesthetic intelligences will engaged by the hands-on creation and customization of their Glog.  
**Intrapersonal:** Students will work independently on their Glogs  
**Interpersonal:** Students will work together in paired discussions during the "timed pair-share" activity followed by a larger class discussion and the "numbered heads" activity.  
**Naturalist:** Naturalists will be engaged by the content of the lesson throughout as it directly relates to environmental concerns.  
  
***Type II Technology:*** The online glogster software allows students to apply what they have learned through a variety and combination of interactive media.   
  
***Rationale:*** This technology allows for a deeper exploration of material that would not be possible when creating a regular non-multimedia-enhanced poster.  
  
  
***NETS STANDARDS FOR TEACHERS***  
**1. Facilitates and Inspire Student Learning and Creativity. Teachers use their knowledge of subject matter, teaching and learning, and technology to facilitate experiences that advance student learning, creativity, and innovation in both face-to-face and virtual environments.**  
a. Promote, support, and model creative and innovative thinking and inventiveness  
  
b. Engage students in exploring real-world issues and solving authentic problems using digital tools and resources  
  
c. Promote student reflection using collaborative tools to reveal and clarify students’ conceptual understanding and thinking, planning, and creative processes  
  
d. Model collaborative knowledge construction by engaging in learning with students, colleagues, and others in face-to-face and virtual environments  
  
***Rationale:*** Teacher and students all work together in a collaborative and respectful environment to discuss strategies that can be used to impact societal change. A foundation of this concept is introduced in previous lessons and enhanced throughout this process.  
  
**2. Design and Develop Digital Age Learning Experiences and Assessments. Teachers design, develop, and evaluate authentic learning experiences and assessment incorporating contemporary tools and resources to maximize content learning in context and to develop knowledge, skills, and attitudes identified in the NETS-S.**  
a. Design or adapt relevant learning experiences that incorporate digital tools and resources to promote student learning and creativity  
  
b. Develop technology-enriched learning environments that enable all students to pursue their individual curiosities and become active participants in setting their own educational goals, managing their own learning, and assessing their own progress  
  
c. Customize and personalize learning activities to address students’ diverse learning styles, working strategies, and abilities using digital tools and resources  
  
d. Provide students with multiple and varied formative and summative assessments aligned with content and technology standards and use resulting data to inform learning and teaching  
  
***Rationale:*** Technology is used to further develop each student's knowledge of their own ability to make an impact for themselves as well as their community and communities around the world. This process will stimulate students desire to learn these concepts and, as the center of their own learning, impact them in such a way that produces self-confidence, discipline, and autonomy